### ARIZONA ADMINISTRATIVE CODE

## TITLE 14. PUBLIC SERVICE CORPORATIONS; CORPORATIONS AND ASSOCIATIONS;

#### SECURITIES REGULATION

#### **CHAPTER 2. CORPORATION COMMISSION FIXED UTILITIES**

#### **ARTICLE 16. RETAIL ELECTRIC COMPETITION**

### ARTICLE 18. ENVIRONMENTAL PORTFOLIO STANDARD AND TARIFF

# R14-2-1618. Environmental Portfolio Standard

### **R14-2-1801.** Definitions

- 1. "Affected Utility" is a public service corporation serving retail electric load in Arizona, but excluding any utility distribution company with more than half of its customers located outside of Arizona.
- 2. "Biogas Electricity Generation" is a process that produces energy from gases that are derived from either municipal solid waste through a digester process or from plant-derived organic matter, agricultural food and feed matter, wood wastes, aquatic plants, animal wastes, vegetative wastes, or wastewater treatment facilities using anaerobic digestion.
- 3. "Biomass" is any raw or processed plant-derived organic matter available on a renewable basis, including dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and residues; wood wastes and residues including landscape waste or right of way tree trimmings or small diameter forest thinnings; aquatic plants; animal wastes; municipal solid wastes; other vegetative waste materials; non-hazardous plant matter waste material that is segregated from other waste; forest-related resources such as harvesting and mill residue, pre-commercial thinnings, slash and brush; miscellaneous waste such as waste pallets, crates, and dunnage; and recycled paper fibers that are no longer suitable for recycled paper production, but not including painted, treated, or pressurized wood, wood contaminated with plastics or metals, tires, or recyclable post-consumer waste paper.
- 4. "Customer-Owned, Customer-Sited Distributed Renewable Energy Systems" are eligible renewable energy systems located on the customer premises and owned by the customer. Eligible systems shall be those systems which are designed primarily to provide electricity or to replace either electricity or fossil fuel uses for the customer. Any net production of electricity or energy for re-sale shall be nominal compared to the electricity or energy from the renewable energy system used by the customer. Eligible technologies shall include solar electric generators; small-scale wind generators (1 MW or less); solar water heaters that replace electricity or fossil fuels; non-residential solar daylighting devices; solar space heaters; solar air conditioners; small new hydropower generators (5 MW or less); fuel cells that only use renewable fuels; customer-owned, customer-sited biomass and biogas electricity generators; and industrial solar heat processing.
- 5. "Customer Self-Directed Renewable Energy Option" is a Commission-approved program under which an eligible entity may self-direct the use of its allocation of Environmental Portfolio Standard Surcharge funds.
- 6. "Distributed Renewable Energy Resource" is any solar electric generator; small-scale wind generator (1 MW or less); solar water heater that replaces electricity or fossil fuels; non-residential solar daylighting device; solar space heater; solar air conditioner; small new hydropower generator (5 MW or less); fuel cell that only uses renewable fuels; customer-owned biomass electricity generator, customer-owned biogas electricity generator; or industrial solar heat processing unit that is located on the customer's premises.

- 7. "Eligible Entity" is an organization that pays Environmental Portfolio Standard Surcharge funds of at least \$25,000 annually for a number of related accounts or services within a UDC's service area.
- 8. "Geothermal Generator" is an electricity generator that uses heat from within the earth's surface to produce renewable electricity.
- 9. "Green Pricing" is an option in which a customer elects to pay a rate premium for renewable electricity.
- 10. "Industrial Solar Heat Processing" is the use of solar thermal energy for industrial or commercial manufacturing or processing applications.
- 11. "Landfill Gas Generator" is an electricity generator that uses methane gasses obtained from landfills to produce renewable electricity.
- 12. "Net Metering" or "Net Billing" is a method by which a customer may use excess electricity from a Customer-Owned and Customer-Sited Distributed Renewable Energy Resource to offset electricity purchased from an Affected Utility.
- 13. "Portfolio Percentage" is the percent of an Affected Utility's total annual retail kWh sales that is composed of electricity derived from renewable electric resources.
- 14. "Renewable Energy Resource" is an energy resource that is replaced rapidly by a natural, ongoing process and that is not nuclear or fossil fuel.
- 15. "Small New Hydropower Electric Generator" is a generator that produces 5 MW or less and is either 1) a low-head, micro hydro run-of-the river system that does not require any new damming of the flow of the stream; 2) an existing dams that adds power generation equipment without requiring new dams, diversion structures, or a change in water flow that will adversely impact fish, wildlife or water quality; or 3) generation using canals or other irrigation systems.
- 16. "Solar Daylighting" is a device specifically designed to capture and redirect the visible portion of the solar beam, while controlling the infrared portion, for use in illuminating interior building spaces in lieu of artificial lighting.
- 17. "Solar Electricity" is the product of using sunlight to directly produce electricity by either photovoltaic devices or solar thermal electric resources.
- 18. "Solar Space Heating" is a method whereby a mechanical system is used to collect solar energy to provide space heating for buildings.
- 19. "Solar Water Heater" is a device that uses solar energy rather than electricity or fossil fuel to heat water for residential, commercial or industrial purposes.
- 20. "Utility Distribution Company" ("UDC") is an electric utility regulated by the Commission that operates, constructs, and maintains the distribution system for the delivery of power to the retail customer.
- 21. "Utility Distributed Solar Electric Generator" is a solar electric generating system owned and operated by an Affected Utility, is located within the distribution system of the local UDC, and does not require a transmission line to deliver power to customers.

## R14-2-1802. Environmental Portfolio Standard Surcharge Tariff

A. Each UDC shall file an environmental portfolio standard tariff within 60 days after the effective date of these rules.

- B. The environmental portfolio standard tariff, when submitted by a UDC and approved by the Commission, shall replace the UDC's existing environmental portfolio standard tariff, unless the Commission has previously approved an environmental portfolio standard adjustor mechanism for that UDC.
- C. Unless otherwise ordered by the Commission, the Environmental Portfolio Standard Surcharge shall be assessed monthly to every metered or non-metered retail electric service. This monthly assessment will be the lesser of \$0.00875-\$0.004988 per kWh or:
  - 1. a. Residential Customers: \$.35 \$2 per service,
  - 2. b. Non-Residential Customers: \$13 \$75 per service,
- 3. e. Non-Residential Customers whose metered demand is 3,000 kW or more for three consecutive months: \$39.00 \$220 per service.

For unmetered services, the lesser of (a) the load profile or otherwise estimated kWh required to provide the service in question; or (b) the service's contract kWh shall be used in the calculation of the Surcharge.

Affected Utilities that are not UDCs would receive a pro rata share of funds collected from the Surcharge for portfolio purposes.

- <u>D.</u> <u>3.</u> Customer bills shall reflect a line item entitled "Environmental Portfolio Surcharge" or other appropriate language as authorized by the Commission."
- E. 2.A UDC may recover part of the costs of the environmental portfolio standard through current System Benefits Charge, if oneexists,
- F. Funds designated for meeting the Environmental Portfolio Standard, whether collected through a surcharge, an adjustor mechanism, or a System Benefits Charge, shall only be used to pay for the above market costs of renewable electricity purchased or the above-market costs of renewable generation that exceed the market cost of comparable conventional generation.

### R14-2-1803. Environmental Portfolio Percentage

- A. Each Affected Utility must derive at least £1% of the total retail kWh sales in 2005 energy sold from Solar Electricity Resources, Distributed Renewable Energy Resources, or environmentally-friendly renewable electricity technologies resources, whether that energy is purchased or generated by the seller. Solar resources include photovoltaic resources and other solar thermal resources that generate electricity. New solar resources and environmentally friendly renewable electric technologies are those installed on or after January 1, 1997.
- B. Notwithstanding any other provision of this Article, no resource installed before January 1, 1997, shall be eligible to satisfy the Portfolio Percentage.
  - 1. Electric Service Providers, that are not UDCs, are exempt from portfolio requirements until 2004, but could voluntarily elect to participate. ESPs choosing to participate would receive a pro rata share of funds collected from the Environmental Portfolio Surcharge delineated in R14 2 1618.A.2 for portfolio purposes to acquire eligible portfolio systems or electricity generated from such systems.
  - 4. Utility Distribution Companies or ESPs that do not currently have a renewables program may request a waiver or modification of this Section due to extreme circumstances that may exist.
- B. The portfolio percentage shall increase after December 31, 2000.
- C. 1. Starting January 1, 2006, the Portfolio Percentage shall increase annually and shall be set according to the

# following schedule:

<u>YEAR</u>	PORTFOLIO PERCENTAGE
2001	.2%
2002	.4%
2003	.6%
2004	.8%
2005	1.0%
2006	1.05%
2007 2012	1.1%

		SOLAR ELECTRIC	DISTRIBUTED	RENEWABLE POWER
VEAD	<b>PORTFOLIO</b>	SET-ASIDE	RENEWABLE ENERGY	PURCHASE
<u>YEAR</u>	<b>PERCENTAGE</b>	<b>PERCENTAGE</b>	SET-ASIDE	AGREEMENT SET-
			<u>PERCENTAGE</u>	ASIDE PERCENTAGE
<u>2005</u>	1.0%	<u>15%</u>	<u>0%</u>	<u>0%</u>
<u>2006</u>	1.25%	<u>15%</u>	<u>10%</u>	<u>10%</u>
<u>2007</u>	1.50%	<u>15%</u>	<u>15%</u>	<u>15%</u>
<u>2008</u>	<u>1.75%</u>	<u>16%</u>	<u>20%</u>	<u>20%</u>
<u>2009</u>	2.00%	<u>17%</u>	<u>25%</u>	<u>30%</u>
<u>2010</u>	2.50%	<u>18%</u>	<u>25%</u>	<u>40%</u>
<u>2011</u>	3.00%	<u>19%</u>	<u>25%</u>	<u>40%</u>
<u>2012</u>	<u>3.50%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2013</u>	<u>4.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2014</u>	<u>4.50%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2015</u>	<u>5.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2016</u>	<u>6.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2017</u>	<u>7.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2018</u>	<u>8.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2019</u>	9.00%	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2020</u>	<u>10.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2021</u>	<u>11.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2022</u>	<u>12.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2023</u>	<u>13.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2024</u>	14.00%	<u>20%</u>	<u>25%</u>	<u>40%</u>
<u>2025</u>	<u>15.00%</u>	<u>20%</u>	<u>25%</u>	<u>40%</u>

# D. Annual Portfolio Percentage Requirement Increase.

Starting in 2006, the Portfolio Percentage shall increase by .25% annually for four years, by .5% for six years, and by 1% each year until 2025, when the Portfolio Percentage will be 15%.

# E. Solar Electric Generation Requirement.

The Solar Electricity generation requirement shall start at 15% of the total Portfolio Percentage requirement in 2005-2007, increase by 1% annually for five years, and remain constant at 20% of the total Portfolio Percentage requirement.

# F. Distributed Solar Electric Requirement.

Starting in 2006, a minimum portion of the annual solar electricity generation requirement shall be from customer-owned, customer-sited distributed solar electric generators. This requirement shall be 10% in 2006 and 2007, 15% in 2008 and 2009, and 20% thereafter.

# G. Distributed Renewable Energy Resource Requirement.

Starting in 2006, a minimum portion of the total Portfolio Percentage requirement must be from distributed renewable energy resources. This requirement will be 10 % in 2006, 15 % in 2007, 20 % in 2008, and 25 % thereafter.

### H. Renewable Power Purchase Agreement ("PPA") requirement.

- A minimum portion of the annual Portfolio Percentage requirement shall come from power purchase agreements resulting from open public bids or requests for proposals ("RFPs"). The requirement shall be 10 % in 2006, 15 % in 2007, 20 % in 2008, 30 % in 2009, and 40 % thereafter. RFPs shall allow bidders to bid for supplying energy only, without the requirement to provide firm capacity or to "firm" renewable capacity offered. Affected Utilities or ESPs are allowed to apply for Commission pre-approval of contracts for renewable energy resources.
- I. Solar Electricity generation that also meets the definition of Distributed Renewable Energy Resources will be eligible to meet both the Solar Electric Generation portfolio percentage requirements and the Distributed Renewable Energy Resource Portfolio percentage requirements. However, for purpose of meeting the overall renewable energy portfolio requirements for total renewable energy produced, the energy from Distributed Renewable Energy Resources will only be counted once. EPS funds reserved by an Affected Utility but not used in a given calendar year for support of the distributed renewable energy resource portfolio percentage requirement can be used for the purpose of meeting any portion of the EPS program in subsequent years.
- J. PPAs entered into prior to January 1, 2006, shall also be eligible to meet the PPA requirement.
  - 2. The Commission would continue the annual increase in the portfolio percentage after December 31, 2004, only if the cost of environmental portfolio electricity has declined to a Commission approved cost/benefit point. The Director, Utilities Division shall establish, not later than January 1, 2003, an Environmental Portfolio Cost Evaluation Working Group to make recommendations to the Commission of an acceptable portfolio electricity cost/benefit point or portfolio kWh cost impact maximum that the Commission could use as a criteria for the decision to continue the increase in the portfolio percentage. The recommendations of the Working Group shall be presented to the Commission not later than June 30, 2003. In no event, however, shall the Commission increase the surcharge caps as delineated in R14 2 1618(A)(2).
  - 3. The requirements for the phase in of various technologies shall be:
    - a. In 2001, the Portfolio kWh makeup shall be at least 50 percent solar electric, and no more than 50 percent other environmentally friendly renewable electricity technologies or solar hot water or R & D on solar electric resources, but with no more than 10 percent on R & D.
    - b. In 2002 and 2003, the Portfolio kWh makeup shall be at least 50 percent solar electric, and no more than 50 percent other environmentally friendly renewable electricity technologies or solar hot water or R & D on solar electric resources, but with no more than 5 percent on R & D.
    - c. In 2004, through 2012, the portfolio kWh makeup shall be at least 60 percent solar electric with no more than 40 percent solar hot water or other environmentally friendly renewable electricity technologies.

### R14-2-1804. Extra credit multipliers

A. C. Affected Utilities Load Serving Entities shall be eligible for a number of extra credit multipliers that may be used to meet the portfolio standard requirements. Extra credits may be used to meet portfolio requirements and extra credits from solar electric generation technologies will also count toward the solar electric fraction generation requirements in R14 2 1618(B)(3). With the exception of the Early Installation Extra Credit Multiplier, which has a five-year life from operational start-up, all other extra credit multipliers are valid for

the life of the generating equipment.

B. 1. Early Installation Extra Credit Multiplier: For new solar electric systems installed and operating prior to December 31, 2003, Load-Serving Entities would qualify for multiple extra credits for kWh produced for five years following operational start-up of the solar electric system. The 5-year extra credit would vary depending upon the year in which the system started up, as follows:

<u>YEAR</u>	EXTRA CREDIT MULTIPLIER
1997	<del>5</del>
1998	.5
1999	.5
2000	.4
2001	.3
2002	.2
2003	.1

Eligibility to qualify for the Early Installation Extra Credit Multiplier would end in 2003. However, any eligible system that was operational in 2003 or before would still be allowed the applicable extra credit for the full five years after operational start-up.

- <u>C.</u> 2. Solar Economic Development Extra Credit Multipliers: There are two equal parts to this multiplier, an instate installation credit and an in-state content multiplier.
  - <u>1.</u> a. In-State Power Plant Installation Extra Credit Multiplier: Solar electric power plants installed in Arizona shall receive a .5 extra credit multiplier.
  - 2. b. In-State Manufacturing and Installation Content Extra Credit Multiplier: Solar electric power plants shall receive up to a .5 extra credit multiplier related to the manufacturing and installation content that comes from Arizona. The percentage of Arizona content of the total installed plant cost shall be multiplied by .5 to determine the appropriate extra credit multiplier. So, for instance, if a solar installation included 80% Arizona content, the resulting extra credit multiplier would be .4 (which is .8 X . 5).
- <u>D.</u> 3. Distributed Solar Electric Generator and Solar Incentive Program Extra Credit Multiplier: Any distributed solar electric generator that meets more than one of the eligibility conditions will be limited to only one .5 extra credit multiplier from this subsection. Appropriate meters will be attached to each solar electric generator and read at least once annually to verify solar performance.
  - 1. a. Solar electric generators installed at or on the customer premises in Arizona. Eligible customer premises locations will include both grid-connected and remote, non-grid-connected locations. In order for Load Serving Entities to claim an extra credit multiplier, the Load Serving Entity must have contributed at least 10% of the total installed cost or have financed at least 80% of the total installed cost.
  - <u>2.</u> b. Solar electric generators located in Arizona that are included in any <u>Affected Utility's Load Serving Entity's Green Pricing program.</u>
  - 3. e. Solar electric generators located in Arizona that are included in any Affected Utility's Load Serving Entity's-Net Metering or Net Billing program.
  - <u>4.</u> d. Solar electric generators located in Arizona that are included in any <u>Affected Utility's Load Serving Entity's solar leasing program.</u>
  - 5. Utility distributed solar electric generators located on utility property or customer property.

- <u>6.</u> e. All Green Pricing, Net Metering, Net Billing, and Solar Leasing programs must have been reviewed and approved by the Director, Utilities Division in order for the <u>Affected Utility Load Serving Entity</u> to accrue extra credit multipliers from this subsection.
- E. 4. All multipliers are additive, allowing a maximum combined extra credit multiplier of 2.0 in <u>all</u> years 1997–2003 <u>after 2000</u>, for equipment installed and manufactured in Arizona and either installed at customer premises or participating in approved solar incentive programs. So, if an <u>Affected Utility Load Serving Entity</u> qualifies for a 2.0 extra credit multiplier and it produces 1 solar kWh, the <u>Affected Utility Load Serving Entity</u> would get credit for 3 solar kWh (1 produced plus 2 extra credit).

#### **R14-2-1805** Implementation Plans and Compliance Reports

<u>A.</u> D. Load Serving Entities selling electricity under the provisions of this Article shall provide reports on sales and portfolio power as required in this Article, clearly demonstrating the output of portfolio resources, the installation date of portfolio resources, and the transmission of energy from those portfolio resources to Arizona consumers. The Commission may conduct necessary monitoring to ensure the accuracy of these data. Reports shall be made according to the Reporting Schedule in R14 2 1613(B). By July 1, 2006 and every July 1 thereafter, each Affected Utility shall file with Docket Control a portfolio implementation plan for the next calendar year and a compliance report for the previous calendar year.

# B. The portfolio implementation plan shall include:

- 1. A description of renewable energy resources proposed to be added by year for the next five years, starting January 1 of the following year, including kW and kWh to be obtained from those resources, identified by technology type;
- 2. The estimated cost of each renewable energy resource proposed to be added, including cost per kWh, and the total cost per year;
- 3. <u>A description of the method by which each renewable energy resource is planned to be obtained (e.g., self-build, customer installation, request for proposals);</u>
- 4. <u>A proposal on recovery of costs, including, if appropriate, surcharge rates or adjustment mechanism rates, with supporting analyses; and</u>
- 5. <u>A line item budget, allocating specific funding amounts for the Distributed Renewable Energy Resource Requirement, for the Power Purchase Requirement, for the Solar Electric Generation Requirement, for the Customer Self-Directed Option, and for "other renewables."</u>
- C. The compliance report shall include a detailed description of the Affected Utility's compliance with the requirements of this Article by year up to December 31 of the previous year. If the Affected Utility has not met the portfolio standard for the most recent year, it may request a waiver for that year for good cause. If the Commission approves the waiver, it may add the un-met kWh requirement to the requirement for the next calendar year.

## R14-2-1806 Uniform Credit Purchase Program

- A. No later than January 1, 2006, the Director, Utilities Division, shall establish a Uniform Credit Purchase Program Working Group.
  - 1. No later than January 1, 2007, the Director shall file a report on the findings of the Uniform Credit Purchase Program Working Group.

- 2. The Uniform Credit Purchase Program Working Group will address issues related to implementing programs to support the Distributed Renewable Energy Requirement and Distributed Solar Electric Requirement.
- 3. Issues to be addressed include, but are not limited to, the consumer participation process, incentive levels, eligible technologies, system requirements and installation requirements.
- 4. The working group shall consider giving priority to implementing the solar electric, solar thermal and solar HVAC technologies.
- B. No later than March 1, 2007, each Affected Utility shall file a credit purchase program for Commission review and approval.

### R14-2-1807. Customer Self-Directed Option.

- A.. By January 1, 2006, all Affected Utilities will provide an option for an Eligible Entity to self-direct the spending of funds paid by that Eligible Entity through the EPS surcharge. The Self-Directed Option will allow consumers the option to use such funds to install customer-owned, customer-sited distributed qualifying renewable energy systems on customer-owned property or buildings to meet customer needs.
  - 1. If a consumer chooses to exercise the option to self-direct its Environmental Portfolio Surcharge funds, the intent to exercise the option shall be made in writing to the Affected Utility.
  - 2. The Utility Distribution Company shall collect Surcharge funds from the customer and the Affected Utility shall return such funds, as needed by the customer, to fund procurement of customer-owned, customer-sited qualifying renewable energy projects.
  - 3. Customers that choose the self-directed option must provide matching funds for qualifying renewable energy projects equal to the funds returned by the Affected Utility from Surcharge funds collected. Customer matching funds may be direct from the customer or provided by third parties through loans, energy management contracts, or lease-buyback arrangements or other standard financing methods used by commercial companies, cities, and state agencies.
  - 4. The Affected Utility shall retain all Environmental Portfolio Standard credits including those from generation and extra credit multipliers. Projects that match the definition of the Distributed Renewable Energy Requirement will count toward the Affected Utility's requirement. Projects that match the definition of the Distributed Solar Electric Requirement will count toward the Affected Utility's requirement.
- F. Any solar electric generators installed by an Affected Utility to meet the environmental portfolio standard shall be counted toward meeting renewable resource goals for Affected Utilities established in Decision No. 58643.

# R14-2-1807 Banking, Sale and trading of Portfolio kWh

- <u>AG.</u> Any <u>Affected Utility Load Serving Entity</u> that produces or purchases any eligible kWh in excess of its annual portfolio requirements may <u>preserve</u> save or bank those excess kWh for use or sale in future years. Any eligible kWh produced subject to this rule may be sold or traded to any <u>Affected Utility Load Serving Entity</u> that is subject to this rule.
- <u>B</u>. Appropriate documentation, subject to Commission review, shall be given to the purchasing entity and shall be referenced in the reports of the <u>Affected Utility Load-Serving Entity</u> that is using the purchased kWh to meet its portfolio requirements.

### R14-2-1808 Annual calculation of portfolio requirements to meet surcharge goals

H. Environmental Portfolio Standard requirements shall be calculated on an annual basis, based upon <u>retail</u> electricity sold during the calendar year.

### R14-2-1809. Manufacturing Partial Credit

- An Affected Utility Load Serving Entity—shall be entitled to receive a partial credit against the portfolio requirement if the Affected Utility Load Serving Entity—or its affiliate owns or makes a significant investment in any solar electric manufacturing plant that is located in Arizona or provides incentives to a manufacturer of solar electric products which locates a manufacturing facility in Arizona. The credit will be equal to the amount of the nameplate capacity of the solar electric generators produced in Arizona and sold in a calendar year times 2,190 hours (approximating a 25% capacity factor). After January 1, 2006, the minimum annual manufacturing capacity of a new plant constructed to meet this requirement must be greater than 5 MW-DC to qualify for this partial credit.
- <u>B.</u> 1. The credit against the portfolio requirement shall be limited to the following percentages of the total portfolio requirement:
- a 2001: Maximum of 50% of the portfolio requirement
- 2002: Maximum of 25% of the portfolio requirement
- 2003 and on: maximum of 20% of the portfolio requirement.
- C. 2. No extra credit multipliers will be allowed for this credit. In order to avoid double-counting of the same equipment, solar electric generators that are used by other <u>Affected Utilities</u> <u>Load Serving Entities</u>-to meet their Arizona portfolio requirements will not be allowable for credits under this Section for the manufacturer/<del>Electric Service Provider</del> <u>Affected Utility</u> to meet its portfolio requirements.

### **R14-2-1810** Development of Standards and Procedures

A. J. The Director, Utilities Division shall develop appropriate safety, durability, reliability, and performance standards necessary for solar electric generating equipment, distributed renewable energy resources, and environmentally-friendly renewable electricity resources technologies and to qualify for use in meeting the portfolio standard percentages. Standards requirements will apply only to facilities constructed or acquired after the standards are publicly issued.

# R14-2-1811. Energy Valuation Methods for Distributed Renewable Energy Resources

- A. K. solar water heating systems or solar air conditioning systems purchased by the Load Serving Entity for use by its customers, or purchased by its customers and paid for by the Load Serving Entity through bill credits or other similar mechanisms. The solar water heaters must replace or supplement the use of electric water heaters for residential, commercial, or industrial water heating purposes. For the purposes of this rule, solar water heaters will be credited with 1 kWh of electricity produced for each 3,415 British Thermal Units of heat produced by the solar water heater and solar For the purposes of this rule, solar water heaters and solar indoor space heating systems will be credited with 1 kWh of electricity produced for each metered 3,415 British Thermal Units of heat produced by the solar water heater or solar indoor space heater.
- B. Formula-derived energy valuation methods using annual energy production certifications from accredited testing agencies or determined by Commission staff may also be used to determine the energy output of residential off-grid and grid-tied solar electric, solar hot water and solar indoor space heating systems. Solar air conditioners shall be credited with kWhs equivalent to those needed used by a SEER 15 rated electric air conditioner to produce a comparable cooling load reduction. Solar water heating systems and solar air conditioning systems effect.
- C. <u>Distributed Renewable Energy Resources</u> shall be eligible for Early Installation Extra Credit Multipliers as

defined in R14 - 2 + 1618(C)(1) R14 - 2 - 1805(B) and Solar Economic Development Extra Credit Multipliers as defined in R14 - 2 + 1618(C)(2)(b) R14 - 2 - 1805(C)(2).

#### R14-2-1813. Environmentally-Friendly Renewable Electricity Resources

- -A. L. An Affected Utility Load Serving Entity shall be entitled to meet the portfolio requirement with electricity produced in Arizona by environmentally-friendly renewable electricity technologies resources that are defined as in-state landfill gas generators, wind generators, and biomass generators, biogas electric generators, hybrid wind and solar electric generators, small new hydropower electric generators (10 MW or less), geothermal generators, and fuel cells that only use renewable fuels. consistent with the phase in schedule in R14 2 1618(B)(3).
- B. Systems using such—environmentally-friendly renewable electricity technologies resources shall be eligible for Early Installation Extra Credit Multipliers as defined in R14 2 1618(C)(1) R14-2-1805 (B) and Solar Economic Development Extra Credit Multipliers as defined in R14 2 1618(C)(2)(b) R14-2-1805 (C)(2).